

Fanshawe College

FIRST: Fanshawe Innovation, Research, Scholarship, Teaching

Documentation (Approvals etc...)

Information Security Management

2018

ISM1 Curriculum Modification for 2019-20

Fanshawe College

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CURRICULUM MODIFICATION REQUEST FORM

COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"

Program Requiring Changes

Program Title: Information Security Management		
Program Number: ISM1		Date Submitted: Click here to enter a date.
Dean responsible for program: Mary Pierce		Chair: Jim Edwards
Credential Provided: <input type="checkbox"/> Declaration of Academic Achievement <input type="checkbox"/> Local Certificate <input type="checkbox"/> Ontario College Certificate <input type="checkbox"/> Diploma <input type="checkbox"/> Advanced Diploma <input checked="" type="checkbox"/> Grad Certificate <input type="checkbox"/> Degree <input type="checkbox"/> Apprenticeship		
Program Intakes: <input checked="" type="checkbox"/> F <input checked="" type="checkbox"/> W <input checked="" type="checkbox"/> S Other:		Catalogue Year(s) Impacted: 2019/20
Residency Requirement: <input checked="" type="checkbox"/> Met or <input type="checkbox"/> Not Met		Date of Last Program Review: 2015/16
<i>I have read the reasons for the change and...</i>		<i>Signature and date</i>
Dean of Faculty (Lead program):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	<i>MYP Nov 28/18</i>
Dean of Faculty (Affiliate program-impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Dean of Faculty (Affiliate program-impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Senior Vice President Academic (required for major changes and late DAs):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Director, Centre for Academic Excellence:	<input checked="" type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	<i>Jacy Geddes Dec 15/18</i>
Office of the Registrar:	<input checked="" type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	<i>Amber Harwood Dec. 5/18</i>
Notes:		

Please answer each of the questions below, if applicable. Missing or incomplete information may delay review of the proposed changes.

1.0 Describe proposed change(s). Complete Appendix A (if necessary) and amend SDAR (Refer to Appendix C).

A thorough overhaul and updating of material is proposed. The streams (elective courses) are being removed as it has proved difficult to manage as students frequently want to change courses, their requests are often difficult (if not impossible) to accommodate.

- INFO-6002: Network Systems & Components is being replaced with a new course INFO-6078: Managing Enterprise Networks.
- INFO-6042: Web Security is increasing credit weight from 3 to 4 credits to enable more advanced concepts to be taught in line with the needs of a grad cert. New course code is INFO-6076
- INFO-6073: Digital Forensics is increasing credit weight from 3 to 4 credits so that labs can be completed in class where assistance is available rather than take home as in the current mode. This course has proved very popular with students and would now be available for all to take rather than just as an elective. New course code is INFO-6077
- INFO-6011: Applied Project Management is being removed to allow for the other changes and increase in credits for other courses.
- INFO-6048: CCNA Security is being replaced with new course SRTY-6079: Security Applications, which will emphasize scripting and tie in with the replacement for INFO-6009 and INFO-6065.
- Some crossover has been identified between:
 - INFO-6009: Network Monitoring & Penetration Testing
 - INFO-6072: Information Security Testing
 - INFO-6065, Ethical Hacking & Exploits
- In order to streamline this content:
 - INFO-6072 will be removed,
 - INFO-6009 will be replaced with INFO-6081: Monitoring and Incident Response
 - INFO-6065 will be updated (possibly including a course title change).

These changes were presented to the PAC at the October 30th meeting and endorsed.

2.0 Reason/Rationale for Changes

2.1 The reason for the change is based on:

- ☐ A recent program review
- ☐ Program Advisory Committee feedback
- ☒ Student feedback
- ☐ KPI results
- ☐ Accreditation or other regulatory requirements
- ☐ Shared curriculum
- ☒ Trends in the field/industry
- ☒ Other (please describe): Existing course/program content and the direction the program should go has been discussed at length at various program team meetings.

2.2 Does the change support the College's Strategic Framework (mission, vision, values)?

- ☒ Yes
- ☐ No (If no, please explain)

2.3 What strategic goal(s) does the proposed change support?

- ☒ Goal 1 - Enhance innovative practices for exceptional student learning
- ☐ Goal 2 - Manage enrolment growth
- ☒ Goal 3 - Optimize use of resources
- ☐ Goal 4 - Build sustainable sources of alternative revenue

3.0 Students

3.1 Will the change affect the cost of the program for students?

- ☐ Yes
- ☒ No

3.2 If yes, there will be an additional cost for:

- ☐ Materials (Include details):
- ☐ Equipment (Include details):
- ☐ Other (Please describe):

4.0 Program Learning Outcomes

4.1 Will the proposed change meet the Program Vocational Learning Outcomes? (Complete Appendix B and mark the changes in the mapping [e.g. red font])

- ☒ Yes
- ☐ No

4.2 Are there any implications related to progression because of pre-requisite courses (and/or co-requisite courses)?

- ☒ No
☐ Yes (If yes, please explain)

5.0 Relationships with Other Programs

5.1 Are any of the courses impacted by the change provided by another School (e.g., SLLS, LKSB) and/or delivered at another campus?

- ☒ No
☐ Yes

5.2 What Schools/Campuses will be impacted by the proposed change?

- ☐ Lawrence Kinlin School of Business
☒ School of Information Technology
☐ School of Tourism, Hospitality and Culinary Arts
☐ School of Community Studies
☐ School of Health Sciences
☐ School of Nursing
☐ School of Public Safety
☐ School of Contemporary Media
☐ School of Design
☐ School Digital and Performing Arts
☐ School of Language and Liberal Studies
☐ Donald J. Smith School of Building Technology
☐ Norton Wolf School of Aviation Technology
☐ School of Applied Sciences and Technology
☐ School of Transportation Technology and Apprenticeship
☐ Continuing Education
☐ Simcoe/Norfolk Regional Campus
☐ St Thomas/Elgin Regional Campus
☐ Woodstock/Oxford Regional Campus
☐ Huron/Bruce Regional Sites

5.3 Will the change affect pathway agreements (e.g., bridging, articulations, laddering, advanced standing) with other Fanshawe program(s) and/or other institution(s)? (Refer to the pathway agreements listed here: <http://transferagreements.fanshawec.ca/>)

- ☒ No
☐ Yes (If yes, indicate when you will notify the other Fanshawe program(s) and/or other institution(s) and the Pathways Coordinator in the Centre for Academic Excellence of the change)

5.4 If this program is a Co-Operative Education program, will the proposed change impact Co-op?

☒ No

☐ Yes (If yes, consult with the Co-op office prior to submission)

6.0 Resource Implications of Proposed Changes

6.1 Will the proposed change have staffing implications?

☐ No

☒ Yes (If yes, please explain): There will be an overall reduction in staff hours (45 hours per semester) due to the removal of the electives.

6.2 Will the proposed change impact any of the Enabling areas?

☒ No

☐ Yes (If yes, please explain)

6.3 Will the proposed change affect space and/or technology requirements?

☐ No

☒ Yes (If yes, please explain): More lab space will be required to house these 4 forensic machines. We already have these however do not have a dedicated space to house them. Other ITY programs could also make use of these machines.

7.0 General College Requirements

7.1 Are changes consistent with Colleges policies?

☒ Yes

☐ No (If no, please explain)

7.2 Will the program meet the General Education requirements (Policy A126) as listed below?

☐ No

☒ Yes

Local Certificate, Ontario College Certificate and Graduate Certificate - none required)	Diploma - 3 required (minimum of 1 must be an elective)	Advanced Diploma - 4 required (minimum of 2 must be electives)
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7.3 Will the program have 25% distinct curriculum to meet the Residency Requirement of 25% credit units? Consider all pathway agreements (e.g., bridging, internal articulations, laddering, advanced standing) with other Fanshawe programs and/or other institutions.

- ☐ No
☒ Yes

Note: In accordance with POLICY NUMBER: A122 Graduation from Approved College Programs

...to be eligible for any College Credential a student must be enrolled and complete at least 25% of that program's credit units at Fanshawe College, unless stipulated differently by other approving bodies such as the Postsecondary Education Quality Assessment Board (PEQAB).

7.4 Indicate:

- i) Total program hours before proposed change: 659
 ii) Total program hours after proposed change: 674 + 15
 iii) Level(s) in which the proposed change(s) occurs: 1 and 2

7.4.1 Are the total program hours consistent with the requirements as listed below?

- ☒ Yes
☐ No (If no, please explain)

Local Certificate - 300 hours	Ontario College Certificate - 600 hours
Diploma - 1200 to 1400 hours	Advanced Diploma - 1800 to 2100 hours
Graduate Certificate - 600 hours	

APPENDIX A: PROPOSED CURRICULUM MODIFICATION

Course Code	Existing DA Courses	Total Hours	Total Credits	Describe proposed changes	Course Code	Proposed DA Courses	Total Hours	Total Credits
Level 1								
INFO-6001	Information Security	60	4	No change	INFO-6001	Information Security	60	4
INFO-6003	O/S & Applications Security	60	4	No change	INFO-6003	O/S & Applications Security	60	4
INFO-6042	Web Security	45	3	Increase hours (new course code)	INFO-6076	Web Security	60	4
INFO-6027	Security Planning	45	3	No change	INFO-6027	Security Planning	45	3
INFO-6047	Routing & Switching	75	5	No change	INFO-6047	Routing & Switching	75	5
ACAD-6002	Graduate Success Strategies	14	1	No change	ACAD-6002	Graduate Success Strategies	14	1
INFO-6002	Network Systems & Components	45	3	Increase hours (new course)	INFO-6078	Managing Enterprise Networks	45	3
INFO-6072	Information Security Testing	OR 45	OR 3	Remove				
TOTAL		344	23	TOTAL			359	24
Level 2								
INFO-6048	CCNA Security	75	5	replace with different course	INFO-6079	Security Applications	60	4
INFO-6009	Network Monitoring & Penetration	45	3	rename (new course)	INFO-6081	Monitoring and Incident Response	45	3
INFO-6010	CISSP Prep	45	3	No change	INFO-6010	CISSP Prep	45	3
INFO-6065	Ethical Hacking & Exploits	60	4	No change	INFO-6065	Ethical Hacking & Exploits	60	4
INFO-6011	Applied Project Management	45	3	Remove				
INFO-6008	I.T. Auditing	45	3	No change	INFO-6008	I.T. Auditing	45	3
INFO-6073	Digital Forensics	OR 45	OR 3	Increase hours (new course code)	INFO-6077	Digital Forensics	60	4
TOTAL		315	21	TOTAL			315	21
PROGRAM TOTAL		659	44	PROGRAM TOTAL			674	45

+ 15

+ 15

- 15

+ 15

COMMS - Vocational Learning Outcomes by Program, Level and Course (Including General Education Courses)

Program Name: Information Security Management
 Program Code: ISM1 (ISM1-ITY-20190)
 Academic Year: 2019-2020
 Date Generated: 2018-11-07
 Only Display Core Courses:

Level 1

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10
ACAD-6002	Graduate Success Strategies					I	I				I
INFO-6001	Information Security	IBC	IBC	IBC	BC		IBC				
INFO-6078	Managing Enterprise Networks	IB	IBC	IB	IBC	IB		IB			IBC
INFO-6003	O/S & Applications Security	IBC	IBC	IBC	BC	BC	IBC				
INFO-6027	Security Planning	IB	IB	IB	IBC	IBC	IBC	IBC	IB	IBC	IBC
INFO-6076	Web Security	IB	IBC	IBC	IB						
INFO-6047	Routing & Switching	IBC	IBC	IBC	IBC						

Level 2

INFO-6008	I.T. Auditing	IBC			IBC	BC	BC	IBC	IBC		IBC
INFO-6081	Monitoring & Incident Response	BC	BC	BC	BC	IB			BC		BC
INFO-6010	CISP Prep	BC	BC	BC	BC						
INFO-6041	Applied Project Management							IBC			
INFO-6048	CCNA Security	BC	BC	BC	B	BC	BC		B		
INFO-6079	Security Applications	IBC	BC	BC	C			I			I
INFO-6065	Ethical Hacking & Exploits	BC	BC	BC	BC	BC			BC		BC
INFO-6077	Digital Forensics	IBC	IBC	IBC							

Vocational Learning Outcomes

1. apply knowledge of computer operating systems, networking, and various application software to the simulation of business processes
2. develop best practices to protect business resources through the application of knowledge of vulnerabilities and exploits
3. develop security strategies for the deployment of security procedures and protective devices
4. integrate information technology strategies that support business functions by employing knowledge of best practices of business processes and systems
5. develop security plans and strategies to include acceptable use of business information and systems by internal employees, contractors, consultants, business partners and customers
6. develop security plans and strategies to ensure the integrity of information in compliance with best practices, relevant policies, standards, and regulations
7. apply project management principles in the deployment of security policies and strategies
8. perform security audits to ensure compliance with security plans, policies, standards, regulations and best practices
9. develop and deliver a corporate training program to communicate both orally and in writing the security requirements for compliance with security policies
10. prepare security documentation for approval by senior management and present results of security audits

Legend

- I Introductory
- B Building
- C Culminating

COMMS - Essential Employability Skills by Program, Level and Course

Program Name: Information Security Management
 Program Code: ISM1 (ISM1-ITY-20189)
 Academic Year: 2018-2019
 Date Generated: 10/18/2018 2:49:11 PM

Level 1

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10	11
ACAD-6002	Graduate Success Strategies	X	X	X	X	X	X	X	X	X	X	X
INFO-6001	Information Security	X	X	X	X	X	X	X	X	X	X	X
INFO-6078	Managing Enterprise Networks	X	X	X	X	X	X	X	X	X	X	X
INFO-6003	O/S & Applications Security	X	X	X	X	X	X	X	X	X	X	X
INFO-6027	Security Planning	X	X	X	X	X	X	X	X	X	X	X
INFO-6076	Web Security	X	X	X	X	X	X	X	X	X	X	X
INFO-6047	Routing & Switching	X	X	X	X	X	X	X	X	X	X	X

Level 2

Course Number	Course Name	1	2	3	4	5	6	7	8	9	10	11
INFO 6008	I.T. Auditing	X	X	X	X	X	X	X	X	X	X	X
INFO-6009	Network Monitoring & Testing	X	X	X	X	X	X	X	X	X	X	X
INFO-6081	Monitoring & Incident Response	X	X	X	X	X	X	X	X	X	X	X
INFO-6010	CISSP Prep	X	X	X	X	X	X	X	X	X	X	X
INFO-6011	Applied Project Management	X	X	X	X	X	X	X	X	X	X	X
INFO-6048	CCNA Security	X	X	X	X	X	X	X	X	X	X	X
INFO-6079	Security Applications	X	X	X	X	X	X	X	X	X	X	X
INFO-6065	Ethical Hacking & Exploits	X	X	X	X	X	X	X	X	X	X	X
INFO-6073	Digital Forensics	X	X	X	X	X	X	X	X	X	X	X

Essential Employability Skills

- 1 Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience.
- 2 Respond to written, spoken or visual messages in a manner that ensures effective communication.
- 3 Execute mathematical operations accurately.
- 4 Apply a systematic approach to solve problems.
- 5 Use a variety of thinking skills to anticipate and solve problems.
- 6 Locate, select, organize and document information using appropriate technology and information systems.
- 7 Analyze, evaluate and apply relevant information from a variety of sources.
- 8 Show respect for diverse opinions, values, belief systems and contributions of others.
- 9 Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.
- 10 Manage the use of time and other resources to complete projects.
- 11 Take responsibility for one's own actions, decisions and consequences.

Legend

- I Introductory
- B Building
- C Culminating

Degree Audit Report

Catalog: 2018/2019-2019/2020

Program: ISM1	Name: Information Security Management
Department: ITY - Information Technology	
Academic Level: PS	
CCD: 7 - 2AcadSem/600-700 hrs	
Credential: Ontario College Graduate Cert	
Grade Scheme: LG2	
Major: ISM1 - Information Security Mgmt	Div: ITY - Information Technology Division
Co-Op Indicator: N/A	

Academic Program Requirement

Total Credits: 44.00	Residency Reqmt: 11.00
GPA Requirement: 2.00	Residency Reqmt GPA: 2.00
Minimum Grade: D	

Academic Requirement: ISM1.18 Information Security Management

Major: ISM1
Grade Scheme: LG2
Minimum GPA: 2.00
Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:
Group 1

	Total Hours	Total Credits	GE
INFO-6001 Information Security	60.00	4.00	
INFO-6003 O/S & Applications Security	60.00	4.00	
INFO-6042 Web Security	45.00	3.00	
INFO-6076 Web Security	60.00	4.00	
INFO-6027 Security Planning	45.00	3.00	
INFO-6047 Routing & Switching	75.00	5.00	
ACAD-6002 Graduate Success Strategies	14.00	1.00	
INFO-6078 Managing Enterprise Networks	45.00	3.00	

Group 2

Take INFO-6002 or INFO-6072

	Total Hours	Total Credits	GE
INFO-6002 Network Systems & Components	45.00	3.00	
INFO-6072 Information Security Testing	45.00	3.00	

Subrequirement: Level 2

Take all of the following Mandatory Courses:
Group 1

	Total Hours	Total Credits	GE
INFO-6048 CCNA Security	75.00	5.00	

Degree Audit Report

INFO-6079 Security Applications	60.00	4.00
INFO-6009 Network Monitoring & Penetration Testing	45.00	3.00
INFO-6081 Monitoring and Incident Response	45.00	3.00
INFO-6010 CISSP Prep	45.00	3.00
INFO-6065 Ethical Hacking & Exploits	60.00	4.00
INFO-6011 Applied Project Management	45.00	3.00

Group 2

Take ~~INFO-6008~~ or ~~INFO-6073~~

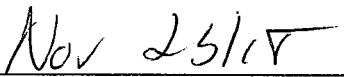
	Total Hours	Total Credits	GE
INFO-6008 I.T. Auditing	45.00	3.00	
INFO-6073 Digital Forensics	45.00	3.00	
INFO-6077 Digital Forensics	60.00	4.00	

Subrequirement: Program Residency


Students Must Complete a Minimum of 11 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program




Approved By Chair/Manager:



Department and Date:



Approved by Dean:



Date:

General Education Approved By(as appropriate):

Date:

TG
Dec 15/18